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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/751,138

12/29/2000

Markku Verkama

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09/30/2005

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EXAMINER

BACKER, FIRMIN

ART UNIT

PAPER NUMBER

3621

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/751,138

Applicant(s)

VERKAMA, MARKKU

Examiner

FIRMN BACKER

Art Unit

3621

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Arguments***

1. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Li et al (U.S. Patent No. 6,219,793) in view of Hoofstein et al (U.S. Patent No. 6,076,163).

4. As per claim 1, Li et al teach an authentication method for telecommunications network including transmitting at least some of the challenges contained in the authentication data blocks to the terminal, choosing one of the challenges for use in the terminal, and based on the challenge, determining a response and a key to be used with an aid of the identification unit of the terminal essentially in the same way as in a subscriber identification module of the mobile communication system, determining an authenticator with an aid of the chosen key in the terminals transmitting from terminal to the network authenticator and a data unit, the data unit

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containing information to the manner in which the authentication is formed after notifying the network with the aid of the data unit of which key corresponding to which challenge was chosen, and determining a check value with the aid of the chosen key in the network and comparing the check value with the authenticator (*see column 14 lines 15-line 65*). Li et al fail to teach an inventive concept of generating a set of subscriber specific authentication data blocks into the network each data block containing a challenge, a response and a key, whereby the generation is performed in the same manner as in the a known mobile communication system. Hoffstein et al teach an inventive concept of generating a set of subscriber specific authentication data blocks into the network each data block containing a challenge, a response and a key, whereby the generation is performed in the same manner as in the a known mobile communication system (*see abstract claims 1, 18, 35 and 36*). Therefore, it would have obvious to one of ordinary skill in the art at the time the invention was made to modify the inventive concept of Li et al to include Hoffstein et al's generating a set of subscriber specific authentication data blocks into the network, each data block containing a challenge, a response and a key, whereby the generation is performed in the same manner as in the a known mobile communication system because this would have provided secure access to a computer system.

5. As per claim 2, Li et al teach that the data unit is the SPI (Security Parameter Index) in the registration message of the Mobile IP protocol (*see column 14 lines 15-line 65*)

6. As per claim 3, Li et al teach that the value of the response determined at the terminal is inserted into the data unit (*see column 14 lines 15-line 65*)

7. As per claim 4, Li et al teach that the challenges are sorted in an order at the terminal with the aid of predetermined sorting criteria and a consecutive number corresponding to the chosen challenge is inserted into the data unit (*see column 14 lines 15-line 65*)

8. As per claim 5, Li et al teach that the identification unit used in the terminal is the subscriber identity module SIM used by the known GSM system and the said authentication data blocks are authentication triplets used by the GSM system (*see column 14 lines 15-line 65*)

9. As per claim 6, Li et al teach that the authentication triplets are fetched from the authentication centre AC of the GSM system (*see column 14 lines 15-line 65*)

10. As per claims 7, Li et al teach that the challenges to be transmitted to the terminal are transmitted by using a known short message switching service (*see column 14 lines 15-line 65*)

11. As per claims 8, Li et al teach that the challenges to be transmitted to the terminal are transmitted an IP datagram to be sent through an IP network (*see column 14 lines 15-line 65*)

12. As per claims 9, Li et al teach that the authentication data blocks are transmitted to the home agent of the terminal and with the aid of the said data unit a message is given to the home agent about which key corresponding to which challenge was chosen, whereby the said check value is determined in the home agent (*see column 14 lines 15-line 65*)

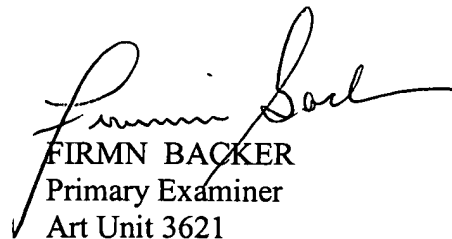
13. As per claims 10-21, the recited subject matter is similar to claims 1-9 as indicated by the applicant. Therefore, they are rejected under the same rationale.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FIRMN BACKER whose telephone number is 571-272-6703. The examiner can normally be reached on Monday - Thursday 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Trammell can be reached on (571) 272-6712. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
FIRMN BACKER  
Primary Examiner  
Art Unit 3621

September 27, 2005